



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,953	09/10/2003	Alexander Karl Huwig	20959/2140 (P 63469)	3518

7590 02/27/2007
Nixon Peabody LLP
Clinton Square
P.O. Box 31051
Rochester, NY 14603-1051

EXAMINER

FUBARA, BLESSING M

ART UNIT	PAPER NUMBER
----------	--------------

1618

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/27/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/658,953

Applicant(s)

HUWIG ET AL.

Examiner

Blessing M. Fubara

Art Unit

1618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) 5-10, 13 and 21-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 11, 12, 14-20 and 27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 1/8/2007.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

Art Unit: 1618

DETAILED ACTION

Examiner acknowledges receipt of IDS filed 1/08/07; response to election/restriction requirement, amendment and remarks filed 11/20/06.

Election/Restrictions

1. Applicant's election with traverse of Group I, claims 1-21, 26 and 27, in the reply filed on 11/20/06 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Applicant further elected polyethylene glycol as the polymer, phosphonic acid as the acid and the method of claim 27. Applicant identified claims 1-8, 11-21 and 27 as reading on the elected species. However, applicant elected phosphonic acid without electing a specific phosphonic acid. The generic phosphonic acid of claim 4 is thus considered. Therefore, claims 1-4, 11, 12, 14, 15-20 and 27 are examined. Applicant did not elect mixed polymer or polyethylene glycol dimethacrylate as the polymer. Therefore, claims 13 and 21 are not examined; Claims 5-10, 13 and 21-26 are withdrawn from consideration.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 1618

3. Claims 1-4, 11, 12, 14-16, 18-20 and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Norfleet et al. (US 5,352,439).

Norfleet discloses oral composition, "such as a toothpaste," the composition comprises polyphosphate anti-tartar agent, synthetic anionic polymeric polycarboxylate or equivalent, fluoride, desensitizing proportion of pain inhibiting potassium salt, detergent or surfactant, sweetener and anti-calculus agent (abstract; column 1, lines 54-66; column 2, line 60 to column 3, line 11). The anti-calculus agents such phosphono compounds, which include phosphonic acids or derivatives, may be included in the composition in place of the anti-tartar polyphosphate (abstract; column 2, line 8-24; column 4, lines 24-38). The phosphates or phosphonic acid meets the acid in the composition defined by claims 2-4 and 11. The potassium salts disclosed release potassium ions into the toothpaste and into the mouth and into the teeth (column 2, line 65 to column 3, line 12), which meets claim 15. The composition further contains mixture of several humectants such as glycerol, sorbitol and polyethylene glycol (column 5, lines 27-33) and the polyethylene glycol, though referred to as humectant, is still polyethylene glycol, meeting the limitation of claim 12. The composition also contains bodying agent, gelling agent or thickener such as carrageenan (Irish moss), xanthan gum and sodium carboxymethyl cellulose, which are preferred, and also gum tragacanth, starch, polyvinylpyrrolidone, hydroxyethylpropylcellulose, hydroxybutyl methyl cellulose, hydroxypropyl methyl cellulose and hydroxyethyl cellulose (column 5, lines 22, 39-48). The agents used as gelling or thickening agents are film-forming agents and thus would inherently act as film forming agents meeting claim 16. Norfleet's mouthwash composition contains the components listed above and in addition contains base or solvent system of 20% ethanol in water (column 14, lines 18-23)

Art Unit: 1618

meeting claim 20 and the solvent of claim 18. Fluoride is present at about 0.05% or 0.08% in the mouthwash (column 14, lines 25-27), b) the thickener is present at a range of 0.2-5% (column 9, lines 18-25), c) polyethylene glycol is present at 1-10% (column 9, lines 14 and 15) and specifically in combination with other humectants is present at about 3% (column 9, lines 16 and 17), d) the fluoride is present at 100-2,300 ppm (0.01-0.23%) (column 8, lines 46-64), e) potassium ions present at 2-10% (column 8, lines 30-39; column 15, lines 2 and 3), f) phosphonic acid/derivative is present at 0.2% to 5% (column 14, line 67 to column 15, line 2), this composition meets claim 18. Flavors such as peppermint and spearmint are present in the composition (column 7, lines 13, 14 and 51; column 9, line 41) and the flavor is present at 0.5% to 2% (column 9, lines 41-45), which meets claim 19. The method of claim 27 applies the composition of claim 1 to a tooth. Norfleet discloses that the composition is desensitizing and toothpaste is applied to the tooth; Norfleet specifically discloses that potassium ion in the toothpaste “aids in desensitizing the teeth” (column 2, lines 17-20) and teaches a process for desensitizing sensitive teeth by applying the disclosed composition (claim 14). Thus, Norfleet meets claim 27.

Protein precipitating properties of the composition is as stated by the claimed properties of the composition in claims 3. Claim 2 also recites the properties of the composition. Since the composition of Norfleet is the same as the claimed composition 1, it flows that the composition of Norfleet would have the same properties. MPEP 2112.01 [R-3] states “when the structure recited in the reference is substantially identical to that of the claims, claimed properties or functions are presumed to be inherent.” In re Best, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). And “when the PTO shows a sound basis for believing that the products of the

Art Unit: 1618

applicant and the prior art are the same, the applicant has the burden of showing that they are not.” In re Spada, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

Prencipe et al. (US 5,300,283) is equivalent to Norfleet in anticipating claims 1-4, 11, 12 and 14 (see abstract; columns 1 and 2, column 5, line 40 to column 6, line 48; column 7, lines 11-20; column 8, lines 30-40; columns 9-12).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 3 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Norfleet et al. (US 5,352,439) in view of Patell (US 5,750,145).

Claim 3, which was rejected under 35 USC 102 above is included in this section in the alternate. Since Norfleet does not disclose that the acid, which in the case of the prior art is a phosphonic acid, precipitates protein; since the acid in the claims and the prior art is phosphonic

Art Unit: 1618

acid, and since the recited limitation of protein precipitation is a property of the acid, it is inherent that the acid of Norfleet would inherently precipitate protein. However, in the alternative, it flows that same products or composition would have the same properties. Therefore, in the case of claim, it would be obvious in the alternative that the acid of the prior art, which is phosphonic acid, would precipitate protein in the same manner as the phosphonic acid of the claims.

Norfleet discloses the claimed composition in which hydroxypropyl methyl cellulose and sodium carboxy methyl cellulose are present in the composition as thickening agents; although, film-forming agent represent a characteristic or intended use of the polymer, the thickening agents are also film-forming agents. Norfleet does not disclose hydroxypropyl cellulose of claim 17. However, it is known in the art that hydroxypropylcellulose, hydroxypropyl methyl cellulose and sodium carboxy methyl cellulose all have the characteristic of film-forming or are film forming agents as disclosed by Patell in column 3, lines 53-57. Therefore, one film-forming agent can be used in place of the other with the expectation that the composition containing these agents form a film upon application. It would have been obvious to one of ordinary skill in the art at the time the invention was made to prepare the desensitizing anti-tartar dentifrice of Norfleet that contains hydroxypropyl methyl cellulose or sodium carboxy methyl cellulose as thickening agent/film-forming agent, and to use the hydroxypropyl cellulose of Patell with the expectation that the composition of Norfleet desensitizes teeth upon application of the composition.

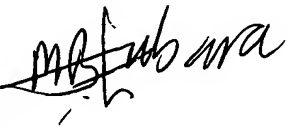
Art Unit: 1618

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blessing M. Fubara whose telephone number is (571) 272-0594. The examiner can normally be reached on 7 a.m. to 5:30 p.m. (Monday to Thursday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Hartley can be reached on (571) 272-0616. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Blessing Fubara
Patent Examiner
Tech. Center 1600

A handwritten signature in black ink, appearing to read 'mfubara', is written over the printed name of the examiner.